

CLAIMS:

The following listing of claims replaces all prior versions.

What is claimed is:

- 1.(Original) A method for operating a communication system, comprising steps of
flexibly allocating Code Division Multiple Access (CDMA) channel resources between
packet-switched shared channels and circuit-switched dedicated channels in order to optimize
system throughput; and
employing a side channel as required to send all or a part of a total amount of data,
depending on the total amount of the data.
- 2.(Currently Amended) A method as in claim 1, wherein a bandwidth allocation scheme
allocates a set of CDMA channels for burst packet-switched channels, and where data is time
division multiplexed over ~~the set of burst packet-switched~~ said set of CDMA channels providing
a wide bandwidth data pipe for packet-switched ~~data~~, data, wherein subscriber stations are
equipped with multiple CDMA channel receivers tuned to the burst packet-switched channels.
- 3.(Currently Amended) A synchronous Code Division Multiple Access (CDMA)
communication system wherein a base site (BS) communicates with subscriber stations (SSs)
through a radio channel, comprising:
a BS channel allocation control unit for allocating radio channel bandwidth to include a
set of shared forward link CDMA channels for use as burst packet-switched channels, wherein
data is time division multiplexed over the burst packet-switched channels to a plurality of said
SSs;
further comprising multiple CDMA burst packet-switched channel receivers at individual
ones of said plurality of SSs for receiving said data from said burst packet-switched channels,
said BS channel allocation control unit further allocating, as required, other CDMA
channels for circuit-switched connections to particular ones of said SSs;
and further comprising a side CDMA channel for making channel requests and for
sending all or a part of a total amount of data, depending on the total amount of the data.

4.(Original) A synchronous CDMA communication system as in claim 3, wherein for a SS that has data to transmit to the BS, the SS transmits an indication to the BS that the SS has data to be transmitted, along with the data.

5.(Currently Amended) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit further allocates a set of shared reverse link CDMA channels for use as reverse burst packet-switched channels that are used in a contention mode by a number of said SSs.

6.(Currently Amended) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit further allocates a set of shared reverse link CDMA channels for use as reverse burst packet-switched channels that are used in a slotted Aloha fashion by a number of said SSs.

7.(Currently Amended) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit further allocates a set of shared reverse link CDMA channels for use as reverse burst packet-switched channels, and wherein individual ones of said S Ss further comprise multiple CDMA burst packet-switched channel transmitters that are used in a contention mode by a number of said SSs to transmit channel requests alone, channel requests along with data, or data alone to said BS.

8.(Currently Amended) A synchronous CDMA communication system as in claim 3, wherein ~~a plurality of~~ at least two of said SSs are assigned to a same forward link data side channel, and where packet multiplexing is used to transmit data packets from the BS to individual ones of ~~plurality of at least two of said~~ SSs ~~that are assigned to the same forward data side channel.~~

9.(Original) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit allocates said radio channel bandwidth under control of a network operator.

10.(Original) A synchronous CDMA communication system as in claim 3, wherein said BS channel allocation control unit allocates said radio channel bandwidth automatically in response to demand.